

Patient Name: RT#:

USER --> MR SIM --> SARCOMA --> U/L EXTREMITY

		Technologist
Setup	Review prior images in PACS	
	Patient changed into gown	
	Load power injector (see Table 1)	
	Flat table overlay positioned on MRI couch and covered with sheet	
	External lasers reset (zeroed) prior to setting up patient	
	Place IV (left antecubital preferred)	
	If lower extremity tumor, position patient foot-first; otherwise head first	
	Shift target volume as close to center of bore as possible	
	Confirm target volume above S8 on spine coil	
Post-op patient: Keep three fiducial markers placed during CT sim in position for MR Sim		
Post-op patient: add fiducials on superior and inferior edges of scar		
Wrap large, flexible, body MATRIX coil around patient and secured with straps		
Use bridges or pads to prevent MATRIX coil from deforming surface anatomy		
	Headphones placed on patient	
	External lasers turned off	
Localizers	Confirm no orange FOV limits (if so, reposition patient)	
Acquisition	Center prescriptions over target volume	
	Post-op patient: Superior/Inferior slice coverage extends fiducials + 5cm	
	Confirm positioning mode set to ISO for all sequences	
	Confirm auto-coil select off, coil selection appropriate, and coils same for each sequence	
	High order shim volume adjusted over brain and copy to each sequence	
	Confirm intensity uniformity correction set to Pre-Scan Normalize	
	Choose phase-encode direction to reduce breathing/flow artifacts	
	Use Ctrl+3, Ctrl+4 to align UPPER and LOWER axial groups. Do not junction over tumor	
	Do not change scan parameters between UPPER and LOWER axial groups	
	High bandwidths or WARP used for metallic implants	
	DWI: Optimize readout bandwidth to minimize effective echo spacing	
	If "MR SIM with Interpretation", add missing diagnostic sequences	
	If patient consented to research, run research sequences	
Multiphase Dynamic Contrast	Timing bolus contrast delay	12-15 sec
	Did fat-sat work? If not, fix before injecting	
	Images screened for artifacts. If necessary, resolve artifact source and re-acquire	
Post-Scanning	Merge UPPER and LOWER axial slice groups in 3D Viewer	
	3D distortion correction applied to all images (Evaluation-->3D Distortion Correction)	
	_DIS3D images sent to MIM_Clinical (Do Not send first image of combined series)	
	Non-distortion corrected images (_ND or _DIS2D) deleted from PACS	
	Initials/Date:	

Table 1: Power Injector Settings

Contrast Media	Gadavist
Contrast Volume	0.1 mL/kg body weight
Injection Rate	2 mL/sec
Saline Flush	5.5 mL

Version 1.1
Date: 3/18/2020